

Committee on Resources

Subcommittee on Fisheries Conservation, Wildlife and Oceans

Statement

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10 June 1999

Mr. Chairman and Members of the Committee, I am Andrew Stamper, Head Veterinarian and Manager of the Marine Animal Rescue and Rehabilitation Program at the New England Aquarium, located in Boston, Massachusetts. For the last 11 years I have worked with both captive and wild marine mammals in California, North Carolina, Maryland, Alaska, and for the last year at the New England Aquarium.

I would like to thank you for this opportunity to appear before your subcommittee and present testimony concerning the John H. Prescott Marine Mammal Rescue Assistance Grant Program. We are honored that the bill has been named for the late John H. Prescott. Mr. Prescott led the New England Aquarium for more than 20 years and one of his passions was the Aquarium's Rescue and Rehabilitation Program. He not only provided the leadership for our program, but also helped other institutions around the country develop similar operations.

The New England Aquarium's Marine Animal Rescue and Rehabilitation Program was established in 1968, pre-dating the passage of the Marine Mammal Protection Act of 1972. Since then, the New England Aquarium has made a major institutional commitment to the rescue and rehabilitation of marine animals and has responded to more than 5,000 strandings including dolphins, porpoises, whales, seals, and sea turtles. In doing so we annually respond to over 1,000 telephone calls, demonstrating the public's acute concern for these animals and our dedication to providing accurate, balanced information.

Since the beginning of our program, the need for stranding programs similar to ours has increased as coastal populations of humans have risen and the competition for coastal space and resources has increased. These stranding programs are in the odd position of having to deal not only with both rare and threatened species, but the most abundant as well, as some marine mammal populations have increased and moved into more populated areas (a direct result of protection under the Marine Mammal Protection Act). The human/wildlife conflict is the inevitable result of these changing demographics, and stranding programs are the best interface to mitigate these issues. This is a uniquely difficult role as a stranding program must be both a humane society dealing with the welfare of stranded animals and an objective institution collecting scientific data and materials. It is the New England Aquarium's opinion that institutions that have taken on the responsibility to respond to strandings are now facing a three way pinch as follows 1) The expanding day to day operations due to increasing human / animal interactions; 2) The increasing need for detailed scientific or research data from Nation Marine Fisheries Service for responsible management; 3) The necessity to provide high quality care for the animals brought in for treatment and hopefully be returned to the wild. These clearly exceeds the original intent of the networks, yet many committed institutions have struggled to pick up the slack.

At the present time, the current network of organizations does not have the capacity to care for all stranded animals. With the growing impact of humans on the world oceans, particularly on coastal fringes, we can expect to see continued increases in the number of animals who strand and are in need of care.

Why is it important for government to become involved?

The John H. Prescott Marine Mammal Rescue Assistance Grant program proposes "to provide grants to eligible stranding centers and eligible network participants for the recovery or treatment of marine mammals, the collection of health information relating to marine mammals, and the operation of facilities for those purposes." Providing humane care to marine mammals is a public service already provided by institutions within the Stranding Network. Supplying such care is demanded by the public, but despite the efforts of the Stranding Network, it is woefully underfunded compared to the need. Health information from stranded animals also is collected at some institutions like the New England Aquarium, but again, due to limited funding, follow-up research has been inadequate.

I propose, in addition to relieving the operational pressures of Stranding Network institutions, this grant program, designated in H.R. 1934, be defined to include support of conservation through more educational and research initiatives. Only by taking a proactive approach to strandings, by examining the causes for these strandings, and by seeking positive long term strategies can we alleviate the pressures being placed on the aquatic environment and the creatures who live there. What could the results of this proactive approach be?

Conservation through research

Human activities have impacted many marine animal populations. Being at the top of the aquatic "food chain," marine mammals are important sentinels of the health of the ecosystem (much like the canary in the coal mine indicating the quality of air). Through surveillance of marine mammal populations, we may be able to determine responsible preventative actions that will assure a healthy environment. Stranding network activities provide the surveillance mechanism by documenting stranding trends in a systematic fashion and providing biological samples to National Marine Fisheries Service and the National Institute of Standards and Technology.

An example of this type of surveillance is taking place now at the New England Aquarium. The Aquarium has archived approximately 8,000 serum samples from stranded animals over the last fifteen years so these samples could be used for disease surveillance and biophysical research. To date these samples have not been utilized to their full extent because of limited financial resources. H.R. 1934 would assist the New England Aquarium in its goal of finding the reasons for strandings, particularly among populations of concern such as the harbor porpoise.

The need to develop better techniques for rapid identification of infectious and potentially dangerous diseases to marine animal and human populations is another critical research area that has strong conservation implications. The discovery and importance of both epidemic disease (made during the harbor seal die off on Cape Cod in 1979-1980) and mass mortalities due to exposure to biotoxins (made during the die off of twenty humpback whales around Cape Cod during the winter of 1987) were made through stranding response activities.^{1, 2} A clear example of a situation that supports this research need occurred in 1987 with a mass die off of dolphins along the eastern seaboard which elicited federal concern regarding contamination issues.³ Although the event was first suspected as biotoxin mortality, these animals in fact

died from morbillivirus, a very lethal disease. Since this occurrence, the Stranding Network in conjunction with National Marine Fisheries Service has screened for this disease in dolphins and for a similar virus in seals, as well as retrospectively looked for evidence for the disease in frozen serum bank samples. The goal was to find answers to some critical questions: If and why are some of these diseases becoming more prevalent? Are these animals becoming compromised due to pollution? Are new diseases emerging or are marine mammals succumbing to an unhealthy environment? Unfortunately, due to limited funding, efforts to find answers to these important questions have been hampered.

The ability to make such assessments of stranded animals would help the members of the Stranding Network determine the impact of releasing rehabilitated animals back into the wild and accurately establish the prognoses of released rehabilitated animals. This would lead to more efficient treatment of endangered and threatened species.

H.R. 1934 also could support satellite tracking of rehabilitated animals. In 1990 the National Marine Fisheries Service's review of the stranding program recommended "NMFS should fund a project to either satellite or radio tag cetaceans which are returned to the ocean at the site of a stranding".⁴ So far, this has not happened all though a few privately funded satellite tags have been placed on rehabilitated animals. The effectiveness (and humanness) of returning rehabilitated animals to the wild can only be determined through post release monitoring. These efforts would give us vital, and previously unknown, information about the natural history of animals thus enlightening us on the impacts of fishing and pollution in the marine environment.

Conservation through education

Presently the Stranding Network rehabilitation facilities allocate most of their resources to husbandry care and other operational costs. Because of the sympathetic chord marine mammals strike in most people, we have an excellent opportunity to develop more outreach programs using marine mammals as the ambassadors for the aquatic world. Outreach helps the general public understand the issues surrounding human impact on the environment and what can be done to minimize this impact.

The New England Aquarium strongly supports the proposed John H. Prescott Marine Mammal Rescue Assistance Grant Program. We recognize the need for increased support for the operations of the Stranding Network in the area of marine mammal rescue and rehabilitation but we strongly believe this should be done in conjunction with and not at the expense of existing National Marine Fisheries Programs. We believe that H.R. 1934 should support programs that emphasize conservation through proactive research and education. Therefore, we feel that institutions applying for grants should have effective education and research capabilities as well as strong animal husbandry programs to provide appropriate care for animals in their charge. Congressional funds would ensure that basic stranding responses continue in a consistent manner. We also recommend that H.R. 1934 provide a clause to require a panel of marine animal experts be appointed to critique grant applications in order to assure a comprehensive approach to marine animal and marine environmental conservation.

I thank you for the opportunity to make this testimony in support of bill H.R. 1934.

1. Geraci, J.R., D.J. St. Aubin, I.K. Barker, R.G. Webster, W.S. Hinshaw, W. J. Bean, H.L. Ruhnke, J.H. Prescott, G. Early, A.S. Baker, S. Madoff, and R. T. Schooly. 1982. Mass mortality of harbor seals: pneumonia associated with influenza A virus. *Science* 215: 1129-1131.

- [2.](#) Geraci, J.R., D.M. Anderson, R.J. Timperi, D.J. St. Aubin, G. A. Early, J.H. Prescott, and C.A. Mayo. 1989. Humpback whales (*Megaptera novaeangliae*) fatally poisoned by dinoflagellate toxin. *Canadian Journal of Fisheries and Aquatic Sciences* 46: 1895-1898.
- [3.](#) Geraci J.R. 1989. Clinical investigation of the 1987-88 mass mortality of bottlenose dolphins along the U.S. central and south Atlantic coast. Final Report to National Marine Fisheries Service, U.S. Navy (Office of Naval Research) and Marine Mammal Commission. 63 p.
- [4.](#) Wilkinson, D. 1991. Program Review of the Marine Mammal Stranding Networks. Report to Assistant Administrator For Fisheries. Office of Protected Resources. National Marine Fisheries Service.

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